

tion of the fruit in the Cruciferæ. Upon this point some writers have put forward singular opinions, in consequence of the difficulty originating from the position of the stigmata in this family. Now all those who suppose that the ovules originate from the median part of a carpellary leaf reduced to the placenta, or joined to its fellow upon the median line of the valves, are refuted by the fact that the placenta presents a perfectly peculiar structure. The opinion of De Candolle, that the septum was formed by the reentering margins of the carpels, is also invalidated, as the four lines of bilateral origin of this organ are situated upon the parenchymatous circumplacentary ring, and the structure of the septum is quite different from that of the valves. The fruit is therefore to be regarded as formed of two carpels alternate with the placentas, and of two intervalvar placentas, from which the septum issues on each side and by a double origin.—*Comptes Rendus*, September 4, 1865, p. 404.

*Male Generative Organs of Phalangium.*

*To the Editors of the Annals of Natural History.*

Chislehurst, Kent, 5th Sept. 1865.

GENTLEMEN,—The 'Annals and Magazine of Natural History' for this month contains a translation of Dr. Krohn's memoir on the Male Generative Organs of *Phalangium*, in which he points out certain mistakes made by Treviranus and Tulk, and explains the true relation and homologies of those organs.

I had, however, four years ago made the same observations, and given a figure in all essentials identical with that of Dr. Krohn ("On the Generative Organs in the *Annulosa*," 'Philosophical Transactions,' 1861, p. 612).

This memoir appears to have escaped the notice of Dr. Krohn.

I am, Gentlemen, your obedient Servant,

JOHN LUBBOCK.

*On the Mode in which the Long-eared Bat captures its Prey.*

Botanic Gardens, Regent's Park,  
Sept. 14, 1865.

MY DEAR SIR,—I have lately noticed a curious way in which the Long-eared Bat (*Plecotus auritus*) captures its prey; and although it may be familiar to naturalists, I have not found it mentioned by authors.

The peculiar structure of Bats is well known. The highly developed membrane used as the flying-apparatus or wings is also extended from the hind legs to the tail, forming a large bag or net (the interfemoral membrane), not unlike two segments of an umbrella, the legs and tail being the ribs.

Having caught a lively male specimen of the common Long-eared Bat, and placed the little fellow in a wire-gauze cage, and inserted a few large flies, he was soon attracted by their buzz, and, pricking up his ears (just as a donkey does), he pounced upon his prey; but instead of taking it directly into his mouth, he covered it with his body, and beat it by aid of his arms, &c., into the bag or

interfemoral membrane; he then put his head under his body, withdrew the fly from the bag, and devoured it at leisure. This appeared always to be the *modus operandi*, more or less cleverly performed. Several times, when the fly happened to be on the flat surface of the ground, the capture appeared more difficult, and my little friend was by his exertions thrown on his back; the tail could then be seen turned round, with its tip and the margin of the membrane pressed against the stomach, forming a capital trap, holding the fly, the captor remaining on his back till he had withdrawn the fly from the bag.

I had no opportunity of observing the action when the Bat was in full flight; but if the insect was captured a few inches from the side of the cage, the mode was the same. When flying, the interfemoral membrane is not extended to a flat surface (and appears not capable of being so stretched), but always preserves a more or less concave form, highly calculated to serve the purposes of a skim-net to capture insects on the wing. Occasionally, when the Bat was sleepy, sitting at the bottom of the cage, nodding his head, a poor silly "Bluebottle Fly," no doubt of tender age, and not read in the natural history of the Vespertilionidæ, with the greatest confidence walked quietly under his friend, passing nose, ears, and eyes without danger; but immediately he touched the sensitive membrane of the bag it was closed upon him, and there was no retreat except by being helped out of the difficulty by the teeth of the Bat.

On looking through books at hand to see if the above was noticed, I find that most accurate of observers of nature's works, Gilbert White, of Selborne, speaking of a tame Bat, says, "If you gave it anything to eat, it brought its wings round before its mouth, hovering and hiding its head in the manner of birds of prey when they feed" (a capital description of the action of my little friend, only no mention is made of the bag). Also, in Bell's 'British Quadrupeds' is the following:—"Of Bats, the interfemoral membrane is probably intended to act as a sort of rudder in rapidly changing the course of the animal in the pursuit of its insect food." "In a large group of foreign Bats which feed on fruits or other vegetable substances, as well as some of carnivorous habits, but whose prey is of a less active character, this part is either wholly wanting or much circumscribed in extent and power."

May it not also be, that they do not require an entomological bag-net?

Believe me yours truly,

To W. Francis, F.L.S.

WM. SOWERBY.

*On the Habits of the Water-Shrew (Crossopus fodiens).*

By N. L. AUSTEN, Esq.

I am induced to offer you the following account of the Water-Shrew, as the animal in question, though tolerably abundant in many localities, may not have come under the personal observation of some of my hearers. I have also never seen it mentioned as having been kept with success in confinement, and therefore will attempt to describe as accurately as possible the habits of a pair that lived in my possession for a considerable time, hoping that the details may not